

STN Search History

FILE 'HOME' ENTERED AT 09:44:28 ON 16 JUL 2003

L1 QUE (BACTERIOICIN OR LANTIBIOTIC OR NICIN) (P) (METAL OR TRANSITIONAL OR CO
BALT OR CO#)

(FILE 'HOME' ENTERED AT 09:44:28 ON 16 JUL 2003)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 09:44:45 ON
16 JUL 2003

SEA (BACTERIOICIN OR LANTIBIOTIC OR NICIN) (P) (METAL OR TRANSIT

1* FILE ADISNEWS

SEA (BACTERIOICIN OR LANTIBIOTIC OR NICIN) (P) (METAL OR TRANSIT

1* FILE ADISNEWS
29 FILE AGRICOLA
2 FILE AQUASCI
10 FILE BIOBUSINESS
4* FILE BIOCOMMERCE
85 FILE BIOSIS
17* FILE BIOTECHABS
17* FILE BIOTECHDS
63* FILE BIOTECHNO
64 FILE CABA
4 FILE CANCERLIT
135 FILE CAPLUS
4* FILE CEABA-VTB
2* FILE CIN
4 FILE CROPU
1 FILE DDFB
1 FILE DDFU
1 FILE DRUGB
1 FILE DRUGNL
2 FILE DRUGU
56 FILE EMBASE
90* FILE ESBIODBASE
13* FILE FEDRIP
0* FILE FOMAD
0* FILE FOREGE
26* FILE FROSTI
82* FILE FSTA
22 FILE GENBANK
1 FILE HEALSAFE
14 FILE IFIPAT
6* FILE KOSMET
56 FILE LIFESCI
0* FILE MEDICONF
65 FILE MEDLINE
3* FILE NTIS
0* FILE NUTRACEUT
72* FILE PASCAL
0* FILE PHARMAML
4 FILE PHIN
6 FILE PROMT
67 FILE SCISEARCH
52 FILE TOXCENTER

73 FILE USPATFULL
3 FILE USPAT2
5 FILE VETU
17 FILE WPIDS
17 FILE WPINDEX

L1 QUE (BACTERIOCIN OR LANTIBIOTIC OR NICIN) (P) (METAL OR TRANSIT

FILE 'MEDLINE, CAPLUS, BIOSIS, BIOTECHNO, LIFESCI, EMBASE, SCISEARCH'
ENTERED AT 09:50:13 ON 16 JUL 2003

L2 527 S L1
L3 1 S L2 AND (NICIN OR LANTIBIOTIC) (L) (METAL OR COBALT)
L4 0 S L2 AND (NICIN OR LANTIBIOTIC) (S) (METAL OR COBALT)
L5 0 S L2 AND (NICIN OR LANTIBIOTIC) (S) (CHELAT#####)
L6 209 DUP REM L2 (318 DUPLICATES REMOVED)
L7 21 S L6 AND (NICIN OR LANTIBIOTIC)
L8 56 S L2 AND (METAL OR COBALT)
L9 21 S L8 AND L6
L10 1 S L9 AND L7
L11 40 S (L7 OR L9) NOT L10
L12 37 S L11 NOT PY>2002
L13 0 S (NICIN OR LANTIBIOTIC) (S) (METAL OR COBALT)

L12 ANSWER 2 OF 37 MEDLINE
 TI **Lantibiotics** produced by lactic acid bacteria: structure, function and applications.
 SO ANTONIE VAN LEEUWENHOEK, (2002 Aug) 82 (1-4) 165-85. Ref: 120
 Journal code: 0372625. ISSN: 0003-6072.
 AU Twomey Denis; Ross R P; Ryan Maire; Meaney Billy; Hill C

L12 ANSWER 6 OF 37 MEDLINE
 TI Homing in on the role of transition **metals** in the HNH motif of colicin endonucleases.
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1999 Sep 17) 274 (38) 27153-60.
 Journal code: 2985121R. ISSN: 0021-9258.
 AU Pommer A J; Kuhlmann U C; Cooper A; Hemmings A M; Moore G R; James R; Kleanthous C

L12 ANSWER 8 OF 37 MEDLINE
 TI Biosynthesis of **lantibiotic** nisin. Posttranslational modification of its prepeptide occurs at a multimeric membrane-associated lanthionine synthetase complex.
 SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1996 May 24) 271 (21) 12294-301.
 Journal code: 2985121R. ISSN: 0021-9258.
 AU Siegers K; Heinzmann S; Entian K D

L12 ANSWER 11 OF 37 MEDLINE
 TI Mode of action of the lanthionine-containing peptide antibiotics duramycin, duramycin B and C, and cinnamycin as indirect inhibitors of phospholipase A2.
 SO BIOCHEMICAL PHARMACOLOGY, (1991 Oct 24) 42 (10) 2027-35.
 Journal code: 0101032. ISSN: 0006-2952.
 AU Marki F; Hanni E; Fredenhagen A; van Oostrum J

L12 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2003 ACS
 TI Molecular characterization of **lantibiotic**-synthesizing enzyme EpiD reveals a function for bacterial Dfp proteins in coenzyme A biosynthesis
 SO Journal of Biological Chemistry (2000), 275(41), 31838-31846
 CODEN: JBCHA3; ISSN: 0021-9258
 AU Kupke, Thomas; Uebele, Michael; Schmid, Dietmar; Jung, Gunther; Blaesse, Michael; Steinbacher, Stefan

L12 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS
 TI Isolation and characterization of lacticin 10790, a new bacteriocin produced by Lactococcus lactis subsp. cremoris KFCC 10790
 SO Journal of Microbiology and Biotechnology (2000), 10(4), 539-543
 CODEN: JOMBES; ISSN: 1017-7825
 AU Joo, Nam Eok; Kim, Il-Han; Yoo, Jin-Young; Lee, Yong-Eok

L12 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2003 ACS
 TI Applications of nisin: a literature survey
 SO Nisin Novel Lantibiotics, Proc. Int. Workshop Lantibiotics, 1st (1991), 434-9. Editor(s): Jung, Guenther; Sahl, Hans-Georg. Publisher: ESCOM, Leiden, Neth.
 CODEN: 57TYA9
 AU Molitor, Ernst; Sahl, Hans Georg

L12 ANSWER 30 OF 37 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI **Metal** ion resistance of the **bacteriocin** producing
enterococci.
SO Asian-Australasian Journal of Animal Sciences, (1993) Vol. 6, No. 3, pp.
441-445.
ISSN: 1011-2367.
AU Laukova, A. (1); Kmet, V.

L12 ANSWER 33 OF 37 LIFESCI COPYRIGHT 2003 CSA
TI Review: Bacteriocins of Lactic Acid Bacteria
SO Food Science and Technology International [Food Sci. Technol. Int.],
(20010800) vol. 7, no. 4, pp. 281-305.
ISSN: 1082-0132.
AU Cintas, L.M.; Casaus, M.P.; Herranz, C.; Nes, I.F.; Hernandez, P.E.

L12 ANSWER 36 OF 37 SCISEARCH COPYRIGHT 2003 THOMSON ISI
TI MODE OF ACTION OF THE LANTHIONINE-CONTAINING PEPTIDE ANTIBIOTICS
DURAMYCIN, DURAMYCIN-B AND DURAMYCIN-C, AND CINNAMYCIN AS INDIRECT
INHIBITORS OF PHOSPHOLIPASE-A2
SO BIOCHEMICAL PHARMACOLOGY, (1991) Vol. 42, No. 10, pp. 2027-2035.
AU MARKI F (Reprint); HANNI E; FREDENHAGEN A; VANOOSTRUM J

L12 ANSWER 2 OF 37 MEDLINE
 AN 2002612525 MEDLINE
 DN 22256668 PubMed ID: 12369187
 TI **Lantibiotics** produced by lactic acid bacteria: structure, function and applications.
 AU Twomey Denis; Ross R P; Ryan Maire; Meaney Billy; Hill C
 CS Department of Microbiology, University College Cork, Teagasc, Dairy Products Research Centre, Moorepark, Fermoy, Co. Cork, Ireland.
 SO ANTONIE VAN LEEUWENHOEK, (2002 Aug) 82 (1-4) 165-85. Ref: 120
 Journal code: 0372625. ISSN: 0003-6072.
 CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 General Review; (REVIEW)
 (REVIEW, ACADEMIC)
 LA English
 FS Priority Journals
 EM 200302
 ED Entered STN: 20021010
 Last Updated on STN: 20030214
 Entered Medline: 20030212
 AB **Lantibiotics** are a diverse group of heavily modified antimicrobial and/or signalling peptides produced by a wide range of bacteria, including a variety of lactic acid bacteria. Based on their diverse structures and mode of action, at least six separate **lantibiotic** subgroups can be suggested, but all subgroups are characterized by significant post-translational modifications, which include the formation of (beta-methyl)lanthionines, among other unusual alterations. These small peptides are produced, modified, exported, sensed and combated by a complex set of proteins encoded by (usually) co-ordinately regulated operons. In some instances, the production and immunity have been shown to be auto-regulated by the mature **lantibiotic**. Since their discovery, interest in **lantibiotics** has been fuelled by their obvious potential as food-grade antimicrobials to improve food safety and quality; a potential which, to date, has been realised only by the longest characterised molecule, nisin. In addition, these peptides are often mooted as alternatives to antibiotics for some biomedical applications. The purpose of this paper is to review recent developments in our understanding of **lantibiotic** structure, molecular genetics and applications for this unusual class of **bacteriocins**.

L12 ANSWER 12 OF 37 MEDLINE
 AN 85174044 MEDLINE
 DN 85174044 PubMed ID: 6532404
 TI Physiological properties and plasmid content of *Bacteroides* spp.
 AU Riley T V; Mee B J
 SO AUSTRALIAN JOURNAL OF EXPERIMENTAL BIOLOGY AND MEDICAL SCIENCE, (1984 Dec) 62 (Pt 6) 717-26.
 Journal code: 0416662. ISSN: 0004-945X.
 CY Australia
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 198505
 ED Entered STN: 19900320
 Last Updated on STN: 19900320
 Entered Medline: 19850520
 AB A collection of 50 clinical isolates of *Bacteroides* was examined for plasmid deoxyribonucleic acid content. An attempt was then made to

correlate the presence of plasmids with a specific phenotypic property. Of the 20 *Bacteroides* which contained plasmids, 18 were found to harbour plasmids of less than or equal to 9.8 megadaltons. The most common plasmid had a molecular weight of 4.8 megadaltons and was found in 9 strains. Most strains had multiple plasmid bands. All strains were examined for resistance to penicillin, cefoxitin, erythromycin, tetracycline, sulphamethoxazole, clindamycin, chloramphenicol, arsenate, silver, cadmium, mercury, chromium, lead, nickel and **cobalt**, and for the production of beta-lactamase, heparinase, deoxyribonuclease, haemolysins and **bacteriocins**. Using a Chi-squared analysis, there was no statistically significant correlation between any of these phenotypic traits and the presence of plasmids, except **bacteriocin** production. A total of 15 out of 20 (75%) of plasmid-containing strains produced **bacteriocins** while only 10 out of 30 (33%) of plasmid-free strains were capable of **bacteriocin** production (chi 2, p less than 0.005). Attempts to transfer or cure resistance to antibiotics and heavy **metals** or **bacteriocin** production were not successful.

L12 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2003 ACS

AN 2000:714524 CAPLUS

DN 134:53580

TI Isolation and characterization of lacticin 10790, a new bacteriocin produced by *Lactococcus lactis* subsp. *cremoris* KFCC 10790

AU Joo, Nam Eok; Kim, Il-Han; Yoo, Jin-Young; Lee, Yong-Eok

CS Department of Chemistry and Biochemistry, Pai-Chai University, Taejon, 302-735, S. Korea

SO Journal of Microbiology and Biotechnology (2000), 10(4), 539-543

CODEN: JOMBES; ISSN: 1017-7825

PB Korean Society for Applied Microbiology

DT Journal

LA English

AB A new **bacteriocin**, named lacticin 10790, was purified from *Lactococcus lactis* subsp. *cremoris* KFCC 10790 by sequential adsorption, immobilized **metal**-affinity, cation-exchange, and C18 reverse-phase chromatogs. The mol. mass of the **bacteriocin** was estd. to be between 3,000 and 3,500 Da. Lacticin 10790 showed a broad antimicrobial spectrum against many gram-pos. bacteria. The **bacteriocin** was stable to heat and in the pH range between 2 and 6. Lacticin 10790 was destroyed by digestion with proteases and exhibited a bactericidal mode of action. An amino acid compn. anal. of purified lacticin 10790 revealed a high concn. of hydrophobic amino acids. The N terminus of the **bacteriocin** was found to be blocked, upon anal. by Edman degrdn. The results suggest that lacticin 10790 is a class I **bacteriocin**.

RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT